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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,219	12/16/2003	David Elie-Dit-Cosaque	139156USNP	7696

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3400 W. PLANO PARKWAY, MS LEGL2

PLANO, TX 75075

EXAMINER

ADHAMI MOHAMMAD SAJD

ART UNIT

PAPER NUMBER

2416

MAIL DATE

DELIVERY MODE

01/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/737,219

Applicant(s)

ELIE-DIT-COSAQUE ET AL.

Examiner

MOHAMMAD S. ADHAMI

Art Unit

2416

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1.5-8.11 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1.5-8.11 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S5108)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

- Applicant's RCE filed 10/6/2008 is acknowledged.
- Claims 1,5,8,11,15, and 18 have been amended.
- Claims 2-4,9,10,12-14,19, and 20 are cancelled.
- Claims 1,5-8,11 and 15-18 are pending.

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/6/2008 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1,5-7,11, and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 11 recites the limitation "the memory address file". There is insufficient antecedent basis for this limitation in the claim.

Claims 5-7 and 15-17 are rejected because they depend from rejected claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1,5-8,11 and 15-18 (as best understood) are rejected under 35 U.S.C. 102(e) as being anticipated by Benedetto (US App. 2005/0259597).

Re claims 1 and 11:

Benedetto discloses *a provider edge bridge* (Fig.2 and Para.[0028,0056,0092] bridge/switches exchange bridge protocol data units (BPDU)).

Benedetto further discloses *communication between two or more customer local area network (LAN) segments through a provider network* (Fig.2 plurality of LANs 202-214 and meshed computer network 200).

Benedetto further discloses *the provider network having one or more provide edge bridges coupled to the customer edge bridges* (Fig.2 switch 218 and Fig. 7).

Benedetto further discloses *in the provider edge bridges coupled to a customer LAN segment, receiving topology change notifications (TCNs) from the customer network* (Fig.2 switch 227, LAN segment 214 and Para.[0092] switch 227 detects a change in active topology and generated an BPDU having a TCN).

Benedetto further discloses *in response to receiving a TCN, monitoring end host addresses in data units received from the customer network for a predetermined time period* (Para.[0019,0092,0113] in response to receiving a TCN, the switch monitors for BPDU TCN on each address port and the TCN-PDU is transmitted with an aging time set to a predetermined time of fifteen seconds).

Benedetto further discloses *flushing an address memory file associating end host addresses with ports of the provide edge bridge in resposne to detecting an end host address indicating that a topology change has occurred in one or more of the custom LAN segments affecting paths of data units through the provider network* (Para.[0019] upon expiration of the predefined default time of 15 seconds, the memory database containing topology change message is quickly discarded/flushed).

Benedetto suggest *detecting at least one of the end host address of a received data unit in the predetermined time is in conflict with information the memory address file, a predetermined number of end host addresses of data units received in the predetermined time period is not found in the address memory file, and the end host address of a data unit received in the*

predetermined time period is not found in the address memory file and if the end host address is found in address memory file of another bridge in the provider network (Para.[0019 filtering database is flushing an address memory file and Para.[0019] to prevent bridges from distributing messages based upon incorrect address information, bridges quickly age-out and discard the "old" information in their filtering database).

Re claims 8 and 18:

Benedetto discloses a method and a communication between two or more customer local area network (LAN) segments through a provider network (Fig.2 plurality of LANS 202-214 and meshed computer network 200).

Benedetto further discloses each customer LAN segment including a customer edge bridge (Fig.2 switch 218-227).

Benedetto further discloses the provider network having one or more provider edge bridges coupled to customer edge bridges (Fig.2 meshed computer network 200 switch 218 and Fig.2 and 7).

Benedetto further discloses each edge bridge of a LAN segment having a multi-homed connection to the provider network (Fig.2 switch 227 and LAN segment 214).

Benedetto further discloses flagging topology change notifications (TCNs) which relate to topology changes affecting paths of data units through the provider network by flagging TCNs which related to a blocked path coupled to the

edge bridge and flagging TCNs generated locally at the edge bridge (Para.[0019] where TCN-PDU is set with a flag and blocking and Para.[0092] blocking state).

Benedetto further discloses each of the provider edge bridges coupled to a customer LAN segment (Fig.2 switches 218-227 and plurality of LANS 202-214).

Benedetto further discloses receiving topology change notifications (TCNs) from the customer network (Para.[0019]).

Benedetto further discloses in response to receiving a flagged TCN, flushing an address memory file associating end host addresses with ports of the provider edge bridge (Para.[0019] upon the expiration of the predefined default time of 15 seconds, the memory database containing topology change message is quickly discarded/flushed).

Benedetto further discloses in response to receiving an unflagged TCN, passing the TCN without flushing an address memory file (Para.[0108] if the root of spanning tree instance in the region is notified or otherwise detects a topology change, it preferably generates and sends a conventional, untagged TCN, which is passed without flushing).

Re claims 5 and 15:

Benedetto suggests storing a list of end host addresses that are received during the predetermined time period and are not found in the address memory file (Para.[0019] filtering database).

Re claims 6 and 16:

Benedetto discloses *the end host address are media access control (MAC) addresses* (Para.[0031,0053,0059]).

Re claims 7 and 17:

Benedetto discloses *the data units are frames* (Para.[0007,0012,0018,0024,0037]).

Response to Arguments

6. Applicant's arguments filed 10/6/2008 have been fully considered but they are not persuasive.

In the remarks, Applicant contends Benedetto merely discloses that bridges significantly reduce the aging time associated with their filtering databases. As such Applicant argues that the office action has failed to prove that the Benedetto reference discloses the elements of claim 1.

The Examiner respectfully disagrees and redirects Applicant to the Benedetto reference. Benedetto clearly established in fig.2 and paragraph 0092 that in the provide edge bridges of a switch 227 is coupled to a customer LAN segment 214 of the switch 227 detecting a change in the active topology and generating a BPDU having a TCN. As further established in paragraphs 0019,0092, and 0113 in response to receiving a TCN, the switch monitors for the BPDU TCN on each address port and the TCN-PDU is transmitted with an aging time set to a predetermined time of 15 seconds. Additionally, the step of flushing

an address memory is addresses in Benedetto's paragraph 0019 where upon the expiration of the predefined default time of 15 seconds, the memory database containing topology change message is quickly discarded/flushed.

With respect to Applicant's argument that Benedetto reference indicates that the bridge will only discard stored BPDU information if a bridge stops receiving BPDU messages on a given port for a maximum age value threshold.

Examiner respectfully does not see the objective of the specific argument. However, Benedetto clearly discloses in Benedetto's paragraph 0019 where upon the expiration of the predefined default time of 15 seconds, the memory database containing topology change message is quickly discarded/flushed. This addresses the claimed limitation. Therefore, based on the response to the argument and addresses claim limitations, the argument claims respectfully remain unpatentable over the cited art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD S. ADHAMI whose telephone number is (571)272-8615. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. S. A./
Examiner, Art Unit 2416

/FIRMIN BACKER/
Supervisory Patent Examiner, Art Unit 2416